

METHAMPHETAMINES-

Methamphetamines are synthetic amphetamines or stimulants that are produced and sold illegally in pill form, capsules, powder, and crystalline chunks. "Crank," "speed, "and "ice" are common street names for methamphetamines.

Crank refers to any form of methamphetamine. Ice is a clear, crystallized, smokeable chunk of methamphetamine that produces a more intense reaction than cocaine or speed. Methamphetamines stimulate the central nervous system, and the effects may last anywhere from eight to 24 hours. Crank and ice are extremely addictive and produce a severe craving for the drug.

In addition to the physical effects, the production and processing of methamphetamines also is dangerous. The ignitable, corrosive, reactive, and toxic nature of chemicals used to produce the drugs can cause explosions, fires, toxic fumes, and damage to health and environment.

▼ Physical Effects

Methamphetamines are highly addictive and users can experience physical and psychological effects. Compared with cocaine, methamphetamine has a much longer duration of action and a larger percentage remains unchanged in the body. Smoking or ingesting methamphetamine causes the user to experience an intense rush or "flash" that lasts only a few minutes; snorting or oral ingestion produces euphoria. Methamphetamine is often used in a "binge and crash" pattern. Users try to maintain the high by binging on the drug.

Short-Term Effects Include:

- Increased attention and decreased fatigue
- Increased activity
- Decreased appetite
- Increased respiration
- Hyperthermia (body temperature elevated to dangerous, sometimes lethal levels)

Long-Term Effects Include

- Dependence and addiction psychosis
- Paranoia and Hallucinations
- Mood disturbances
- Stroke
- Weight loss

Repeated use of the drug can lead to addiction, violent behavior, anxiety, confusion, insomnia, and psychotic behavior (including intense paranoia, and visual and auditory hallucination.) Chronic use can also result in inflammation of the heart lining and other cardiovascular problems.

Methamphetamines are manufactured in clandestine laboratories located, generally, on abandoned farms. Methamphetamines can be produced with readily available and inexpensive materials. Many of these materials, though, are highly volatile. Due to its illegal manufacture, dosage is impossible to control and its chemical composition is unknown.



▼ Health Risks

Some of the many health-related consequences associated with methamphetamine use include increased respiration, tremors, convulsions, and such cardiovascular problems as chest pain, hypertension, and increased heart rate. Methamphetamine also is thought to damage brain cells that contain dopamine and serotonin, which transmit impulses to the brain. Methamphetamine use can reduce dopamine levels, producing symptoms similar to those of Parkinson's Disease. It also may damage nerve endings.

Hyperthermia and convulsions, as well as such cardiovascular side effects as chest pain and hypertension, caused by methamphetamine use may result in death. Increased heart rate and blood pressure, leading to damaged blood vessels in the brain, may produce strokes. Methamphetamine use affects the lungs, kidneys, and liver. Pulmonary edema and cardiac arrest may occur after prolonged use.

▼ Prenatal Complications

Methamphetamine use during pregnancy can cause major problems for babies, including asocial behavior, an inability to bond, tremors, and birth defects. Developmental problems may result because of reduced blood flow, and the drug may have a toxic effect on the fetal brain.

▼ Treatment

Methamphetamine users may experience long-term physical and psychological effects. Current treatment efforts include those used for other addictions: detoxification, residential treatment, and outpatient rehabilitation. Little information is available concerning methamphetamine-specific treatment programs. However, research on protocols used in other states is being reviewed.

▼ Public Education and Prevention

Public education on the devastating effects of methamphetamine use on the human body and the environment, and about access to treatment services for those who need them, is essential to address growing methamphetamine use in Missouri as well as other states.

Also, community-wide prevention strategies are needed to reduce the likelihood that methamphetamines will be used and to promote health and safety for the people of Missouri.

▼ Information

For more information on methamphetamine, visit the websites of the National Institute on Drug Abuse (www.drugabuse.gov), and the National Council for Alcohol and Drug Information, NCADI (www.health.org).



For more information, contact the Missouri Department of Mental Health, Division of Alcohol and Drug Abuse P.O. Box 687 1706 East Elm Jefferson City, MO 65102 573-751-4942 or 1-800-364-9687 modmh.state.mo.us

